



Canadian Nuclear  
Safety Commission

Commission canadienne  
de sûreté nucléaire

# Record of Proceedings, Including Reasons for Decision

In the Matter of

Proponent	Low-level Radioactive Waste Management Office
Subject	Environmental Assessment Screening Report Regarding the Proposed Port Granby Long-Term Low-Level Radioactive Waste Management Project
Hearing Date	August 17, 2009

## **RECORD OF PROCEEDINGS**

Proponent: Low Level Radioactive Waste Management Office

Address/Location: 5 Mill Street South, Port Hope, Ontario L1A 2S6

Purpose: Environmental Assessment Screening Report regarding the proposed Port Granby Long-Term Low-Level Radioactive Waste Management Project

Application received: November 16, 2001

Date of hearing: August 17, 2009

Location: Canadian Nuclear Safety Commission (CNSC), 280 Slater St., Ottawa, Ontario

Members present: M. Binder, Chair

Secretary: K. McGee

Recording Secretary: S. Gingras

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## Introduction

1. In July 2001, Natural Resources Canada (NRCan) delegated the Low Level Radioactive Waste Management Office (LLRWMO) to act as a proponent for a project to cleanup and to provide appropriate local long-term management of low-level radioactive wastes and marginally contaminated soils, located in the Municipality of Clarington, that are associated with the existing Port Granby Waste Management Facility.
2. In November 2001, NRCan, writing on behalf of the LLRWMO, sent the CNSC a Letter of Intent stating the plans of the LLRWMO to apply for a Waste Nuclear Substance Licence for the possession, management and storage of waste nuclear substances at Port Hope.
3. Before it can proceed with the consideration of a licence application under the provisions of the *Nuclear Safety and Control Act*<sup>1</sup> (NSCA), the Commission must, in accordance with the requirements of the *Canadian Environmental Assessment Act*<sup>2</sup> (CEAA), make a decision on an Environmental Assessment (EA) for the proposed project. Following a review of the project description, it was determined that a screening of the project was required. The proposal constitutes a 'project' as defined by the CEAA and the issuance of a Waste Nuclear Substance Licence under section 24(2) of the NSCA is a 'trigger' in the *Law List Regulations*<sup>3</sup> established under the CEAA. Therefore, pursuant to section 18(1) of the CEAA, the Commission is required to ensure the conduct of a screening EA of the project and the preparation of an EA Screening Report.
4. The guidelines for the EA (EA Guidelines), under sections 15 and 16 of the CEAA, including statements of the scope of the project and scope of the assessment, were presented to a Panel of the Commission on July 11, 2002, concurrently with presentation at NRCan and DFO. Following approval of the EA Guidelines by the Commission, NRCan delegated the conduct of the environmental assessment, including the supporting technical studies and public consultation program, to the LLRWMO, in accordance with subsection 17(1) of the CEAA.
5. NRCan assumed the position of lead Responsible Authority<sup>4</sup> (RA) for the EA. The Commission also declared itself to be an RA. DFO, Health Canada, Environment Canada, the Canadian Environmental Assessment Agency (the Agency) and Transport Canada identified themselves as federal authorities (FAs) for the purpose of providing expert assistance during the environmental assessment.

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<sup>1</sup> S.C. 1997, c. 9.

<sup>2</sup> S.C. 1992, c. 37.

<sup>3</sup> S.O.R./94-636.

<sup>4</sup> Responsible Authority in relation to an EA is determined in accordance with subsection 11(1) of the CEAA.

6. The draft Screening Report for the Port Granby Project has been prepared by the RAs based on the environmental assessment study report (EASR) for the project prepared by the LLRWMO and the subsequent analysis of the EASR by the RAs, Federal Authorities (FAs) and interested Province of Ontario Ministries.
7. This *Record of Proceedings* describes the Commission's consideration of the Screening Report and its reasons for decisions on the results. The Screening Report is attached as an appendix to CMD 09-H119.

#### Issues

8. In considering the Screening Report, the Commission was required to decide:
  - a) whether the Screening Report is complete; that is, whether all of the factors and instructions set out in the approved EA Guidelines and subsection 16(1) of the CEAA were adequately addressed;
  - b) whether the project, taking into account the mitigation measures identified in the Screening Report, is likely to cause significant adverse environmental effects;
  - c) whether the project will be referred to the federal Minister of the Environment for referral to a review panel or mediator (i.e., pursuant to paragraph 20(1)(c) of the CEAA); and
  - d) whether the Commission will proceed with its consideration of the licence application under the NSCA (i.e., consistent with paragraph 20(1)(a) of the CEAA).

#### Hearing

9. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission (hereafter referred to as the Commission) to hear this matter.
10. In making its decision, the Commission considered information presented for a hearing held on August 17, 2009 in Ottawa, Ontario. The hearing was conducted in accordance with the Commission's process for determining matters under the CEAA. During the hearing, the Commission considered a written submission from CNSC staff (CMD 09-H119), as well as an intervention from the Municipality of Clarington (CMD 09-H119.1).

## Decision

11. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*, the Commission decides that:

- a) the Environmental Assessment Screening Report appended to CMD 09-H119 is complete. The scope of the project and assessment were appropriately determined in accordance with sections 15 and 16 of the *Canadian Environmental Assessment Act*, and all of the required assessment factors were addressed during the assessment.
- b) the project, taking into account the mitigation measures identified in the Environmental Assessment Screening Report, is not likely to cause significant adverse environmental effects;
- c) it will not refer the project to the federal Minister of the Environment for his referral to a federal Environmental Assessment review panel or mediator; and
- d) consistent with paragraph 20(1)(a) of the *Canadian Environmental Assessment Act*, the Commission will proceed to consider the application for a Waste Nuclear Substance Licence under the provisions of the *Nuclear Safety and Control Act*.

## Issue and Commission Findings

12. In making its decision, the Commission addressed the four issues identified above, under four main areas: the completeness of the Screening Report, the significance of the environmental effects and likelihood to cause adverse environmental effects, the nature and level of public concern, and the follow-up program. The Commission's findings are summarized below.

### *Completeness of the Screening Report*

13. In its consideration of the completeness of the Screening Report, the Commission considered whether the assessment had adequately addressed the scope of the project and assessment factors to be considered.
14. In its submission, CNSC staff reported that the existing environment was characterized within seven components that were considered relevant with respect to the likely interactions between the Port Granby Project and the environment. CNSC staff added that each component was refined into sub-components representing features susceptible to project effects or a potential pathway for transfer of an effect to another component. CNSC staff also noted that the baseline

characterization included a selection of valued ecosystem components (VECs) for each environmental component.

15. CNSC staff further reported that the RAs have reviewed the EASR prepared by the LLRWMO and its supporting technical documents, the comments from technical reviewers in federal departments and interested Ontario Ministries and the public comments on the public registry. The RAs have also considered the extensive program of public information and consultation carried out by the proponent in conducting the assessment studies.
16. CNSC staff reported that the Ontario Ministry of the Environment (MOE) confirmed that there were no provincial EA requirements under the Ontario *Environmental Assessment Act*<sup>5</sup> for the project. CNSC staff added that the MOE indicated an interest in participating in the technical review of the assessment document. CNSC staff also indicated that the Ministry of Natural Resources, the Ministry of Culture and the Ministry of Transportation also participated in the EA process.
17. Based on the information presented, the Commission is of the opinion that the applied assessment method was adequate and that the Screening Report is complete and compliant with the requirements of the CEAA.

#### ***Likelihood and Significance of Environmental Effects***

18. With respect to the effects of the project on the environment, CNSC staff stated that the method used for the assessment and mitigation of environmental effects consisted of a series of steps. First, project-environment interactions were identified. Each interaction was then evaluated to determine if it would be likely to result in a measurable change to the environment and to the VECs identified. Likely environmental effects and the means to mitigate adverse effects were then evaluated and the remaining or likely residual environmental effects identified.
19. CNSC staff reported that the following environmental components were addressed: atmospheric, geology and groundwater, aquatic, terrestrial, and socio-economic. Aboriginal interests, effects on human health and safety, cumulative effects, effects of the environment on the project, alternative means of carrying out the project, effects on the capacity of renewable resources, and malfunctions and accidents were also considered.
20. CNSC staff indicated that the EA predicts that, overall, the Port Granby Project would result in many environmental benefits. The project is predicted to cause adverse effects in some components of the environment, although application of mitigation measures would largely address the effects. Minor residual adverse effects are predicted to occur during the Construction Phase for some aspects of

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<sup>5</sup> R.S.O. 1990, c.E.18.

the socio-economic environment and with respect to the feelings of well-being of members of the public.

21. In its intervention, the Municipality of Clarington indicated that socio-economic effects of the project should be properly managed. This intervenor detailed several actions that should be taken during the course of the project, including the implementation of a dust management plan, the development of a contingency plan, impact management plans for homes along transportation routes, and the involvement of residents in the monitoring process.
22. CNSC staff concluded that all likely residual adverse effects were determined to be minor adverse effects and, as such, not to be significant, taking mitigation measures into account.
23. Based on the presented information and on the review of the Screening Report, the Commission concludes that the proposed project, taking into account the identified mitigation measures, is not likely to cause significant adverse environmental effects.

#### ***Public Concern***

24. CNSC staff reported that subsection 18(3) of the CEAA provides discretion to an RA to allow opportunity for the public to examine and comment on the EA screening report before taking a course of action pursuant to Section 20 of the CEAA. For the Port Granby Project, the public consultation was led by NRCan in collaboration with CNSC staff.
25. CNSC staff indicated that the draft EA Screening Report was released for a 45-day public review period that closed on June 17, 2009. The public, Federal Authorities, provincial and municipal authorities and First Nation communities were given the opportunity to comment. Advertisements of the public review period were published in local newspaper and aired on local radio stations. Copies of the report were mailed to a list of interested people. Letters were sent to First Nation communities to request comments on the draft EA Screening Report. The draft EA Screening Report was presented to the Municipal Council of Clarington on April 27, 2009. In addition, Open Houses on the draft EA Screening Report were also conducted on May 27, 2009 in the local area.
26. CNSC staff reported that, in total, 10 intervenors (6 members of the public, two submissions from a non-profit organization, one municipality and one Federal Authority) provided comments on the draft EA Screening Report during the 45-day public review. No comments from First Nation communities were received. Comments were received concerning the appropriateness of the proposed location, elaboration of details, a complaints resolution process, property value impacts, community involvement in the monitoring process, geology and groundwater and

human health.

27. Based on the information provided, the Commission is of the view that there was sufficient opportunity for the public to be informed and to express its views on the project. The Commission is of the opinion that public concern does not warrant referral of the project to the Minister of the Environment for his referral to a review panel or mediation.

***Follow-up Program***

28. A follow-up program under CEAA verifies the effectiveness of mitigation measures and the accuracy of environmental predictions.
29. CNSC staff reported that a Follow-up Program as defined by the CEAA would be warranted for the Port Granby Project. The objective of the Follow-up Program would be to confirm the key assumptions used in the EASR for the effects predictions.
30. CNSC staff indicated that the LLRWMO had identified a number of types of monitoring and follow-up activities that it would propose to implement as part of its adaptive management approach with respect to the project. CNSC staff added that the LLRWMO will further refine the proposed Program for the acceptance of the relevant RAs. The Follow-up Program would be developed prior to the issuance of a CNSC licence for the project.
31. In its intervention, the Municipality of Clarington expressed the view that requirements for water treatment, groundwater flow and flushing should be properly defined, and that monitoring wells in the existing waste material at several locations should be installed in order to sample actual waste quality before the design of the treatment system is finalized. This intervenor also noted that the Follow-up Program should provide monitoring or contingency plans related to follow-up activities. The Municipality of Clarington added that there should be a description of the monitoring programs, and that mitigation measures need to be confirmed and tracked to demonstrate the assessment of net effects.
32. CNSC staff recommended to the Commission that the follow-up program be incorporated as a condition of the licence if the project is licensed.
33. Based on the above information, the Commission takes note that the LLRWMO has identified monitoring and follow-up activities for the project. However, the Commission expects the LLRWMO to develop a complete Follow-up Program, approved by the relevant RAs, before the Commission holds hearings for the licensing of the project.

**Conclusion**

34. The Commission has considered the information and submissions as presented in the material available for reference on the record.
35. The Commission concludes that the proposed "*Screening Report – the Port Granby Long-Term Radioactive Waste Management Project*" attached to CMD 09-H119 is complete and meets all of the applicable requirements of the *Canadian Environmental Assessment Act*.
36. The Commission concludes that the project, taking into account the appropriate mitigation measures identified in the EA Screening Report, is not likely to cause significant adverse environmental effects.
37. Furthermore, the Commission also concludes that, at this time, it will not request the federal Minister of the Environment to refer the project to a review panel or mediator in accordance with the provisions of the CEEA.
38. Therefore, the Commission, pursuant to paragraph 20(1)(a) of the CEEA, can proceed with the consideration of a licence application for a Waste Nuclear Substance Licence under the provisions of the *Nuclear Safety and Control Act*.



Michael Binder  
President,  
Canadian Nuclear Safety Commission

AUG 17 2009

Date